AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1. (Previously Presented) A system for integrating a fiber optic fixed access network and a fiber optic radio access network, said system comprising:

a radio base station comprising a main unit and a plurality of radio units located remotely from the main unit, said main unit comprising a digital baseband component and a digital intermediate frequency processing unit, and the plurality of radio units comprising only radio-related components of the base station, wherein the plurality of radio units transmit and receive radio unit communications with a plurality of mobile units;

a first passive wavelength multiplexer that transmits and receives the radio unit communications with the plurality of radio units, and transmits and receives fixed access communications with a plurality of fixed access subscribers;

wherein the first passive wavelength multiplexer is connected to each of the radio units and to each of the fixed access subscribers using fiber optic connections,

wherein each of the plurality of radio units transmits and receives the radio unit communications with the first passive wavelength multiplexer using a wavelength that is different for each of the radio units and different from that used to transmit and receive the fixed access communications with the fixed access subscribers, and

wherein the first passive wavelength multiplexer passively multiplexes the radio unit communications and the fixed access communications onto a fiber optic communications link;

a second passive wavelength multiplexer connected to the first multiplexer through the fiber optic communications link, wherein the radio unit communications and the fixed access communications are transmitted and received together between the first passive wavelength multiplexer and the second passive wavelength multiplexer through the fiber optic communications link using the different wavelengths; and

at least one main unit, connected to the second passive wavelength multiplexer, for transmitting and receiving the radio unit communications with the second passive wavelength multiplexer and with a radio network.

2. (Canceled)

3. (Previously Presented) The system according to claim 1, further comprising:

means for distributing a reference clock signal through the fiber optic fixed access network at a wavelength that is different from that used to transmit and receive the radio unit communications with each of the radio units and different from that used to transmit and receive the fixed access communications with the fixed access subscribers.

4. (Previously Presented) The system according to claim 1, wherein the first and second passive wavelength multiplexers are implemented in Ethernet switches.

5. (Previously Presented) The system according to claim 4, wherein the passive wavelength multiplexers perform optical coarse wavelength division multiplexing.

6. (Previously Presented) The system according to claim 5, wherein the radio unit communications and the fixed access communications are transmitted and received together between the first passive wavelength multiplexer and the second passive wavelength multiplexer using a fiber pair in the fiber optic fixed access network.

7-30. (Canceled)